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| FOR TENDER | | | |
| CLIENT | | | |
|  | | MAHARASHTRA INDUSTRIAL TOWNSHIP LTD (MITL) | |
| PROJECT | | | |
| DESIGN, CONSTRUCTION, TESTING, COMMISSIONING AND OPERATION & MAINTENANCE OF INFRASTRUCTURE WORKS AT DIGHI PORT INDUSTRIAL AREA (DPIA)- PHASE 1 UNDER DELHI MUMBAI INDUSTRIAL CORRIDOR (DMIC) ON EPC BASIS | | | |
| TITLE | | | |
| SINGLE LINE DIAGRAM FOR 33/11 KV SUB STATION-3 | | | |
| PROJECT CODE: D16128 | | STATUS: ISSUED FOR TENDER | |
| | | DATE: 24.07.2025 | |
| SHEET NO: 01 OF 01 | | SCALE: NTS | DWG SIZE: A1 |
| DRAWING NO: | | REV NO: R1 | |

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| <h1 style="margin: 0;">MITL-DPIA-PKG1-EL-06</h1> | | |

- NOTE**
1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE.
 2. NO DIMENSIONS ARE TO BE SCALED FROM THIS DRAWING.
 3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND STRUCTURAL DRAWINGS.
 4. ALL DIMENSIONS MUST BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK OR PREPARING ANY SHOP DRAWINGS. IN CASE OF ANY DISCREPANCY, THE SAME SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT & GOT CLARIFIED BEFORE EXECUTION OF WORK.
 5. THIS DRAWING IS THE PROPERTY OF EGIS INDIA CONSULTING ENGINEERS PVT. LTD. AND MUST NOT BE PASSED TO ANY PERSON OR BODY NOT AUTHORIZED BY US TO RECEIVE IT NOT BE COPIED OR OTHERWISE MADE USE EITHER IN FULL OR IN PART BY SUCH PERSON OR BODY WITHOUT OUR PRIOR PERMISSION IN WRITING.
 6. RATINGS OF POWER TRANSFORMERS SHALL BE CONSIDERED BASED ON THE ACTUAL LOAD REQUIREMENT.
 7. 33kV & 11kV GIS SWITCHBOARD SHALL BE FULLY COMPARTMENTALIZED ONE(1) SETS OF 3 PHASE VACUUM GAS / SOLID SILICON INSULATED BUS BAR METAL ENCLOSURES FOR EACH SWITCHGEAR VERTICAL.
 8. MAXIMUM DEMAND INDICATED ON SWITCHING STATION AND DISTRIBUTION SUBSTATION IS TENTATIVE ONLY.
 9. POWER SUPPLY AT 33 kV & 11 kV VOLTAGE LEVEL SHALL BE TRANSMITTED TO HT CONSUMERS THROUGH 33 kV SWITCHING SUBSTATION AND 33/11 kV DISTRIBUTION SUBSTATIONS RESPECTIVELY. EACH 33 kV SWITCHING SUBSTATION SHALL BE CAPABLE OF TRANSMITTING MAXIMUM POWER OF 40 MVA AND EACH 33/11 kV DISTRIBUTION SUBSTATION SHALL BE CAPABLE OF TRANSMITTING MAXIMUM POWER OF 30 MVA.
 10. ALL OUTGOING FEEDERS SHALL BE PLC/SCADA COMPATIBLE.

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| NOTES:- |
| 1. ALL THE CT RATINGS WITH BURDEN SHALL BE CONSIDERED AS PER THE SYSTEM REQUIREMENT. |
| 2. FINAL SWITCHGEARS RATING SHALL BE CONSIDERED BASED ON THE ACTUAL LOAD REQUIREMENT & AS PER THE ELECTRICAL DISTRIBUTION SCHEME. |
| 3. SHORT CIRCUIT CURRENT RATING OF THE SWITCHGEARS & BUS BAR SHALL BE AS PER SYSTEM DESIGN REQUIREMENTS. |
| 4. FRLS COPPER CONTROL WIRING WITH SPACE HEATER, THERMOSTAT AND CONTROL MCB'S ETC. SHALL BE PROVIDED IN ALL THE ELECTRICAL PANELS AS REQUIRED. |
| 5. FINAL CABLE SIZES SHALL BE CONSIDERED BASED ON THE ACTUAL LOAD REQUIREMENT & AS PER THE ELECTRICAL DISTRIBUTION SCHEME. |

| SYSTEM PARAMETERS | | |
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| RATED VOLTAGE | 33 kV | 11 kV |
| MAXIMUM VOLTAGE | 36 kV | 12 kV |
| RATED FREQUENCY | 50 Hz | 50 Hz |
| RATED POWER FREQUENCY WITHSTAND VOLTAGE (1 MIN) | 70 kV | 28 kV |
| RATED LIGHTNING IMPULSE WITHSTAND VOLTAGE (1.2/50 MICRO SEC) | 170 kVp | 75 kVp |
| RATED SHORT BREAKING CURRENT | 25 KA | 25 KA |
| RATED SHORT TIME WITHSTAND DURATION | 3 Sec. | 3 Sec. |
| DRIVING MECHANISM OF CIRCUIT BREAKER | STORED ENERGY SPRING | STORED ENERGY SPRING |
| DRIVING OPERATING SEQUENCE | 0-0.3S-CO-3 MIN-CO | 0-0.3S-CO-3 MIN-CO |